

**Patent claims:**

1. At least three-layered, coextruded, tubular, biaxially stretched seamless tubular casing comprising, viewed from the outside inwards,
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- a) an outer layer A which comprises as the main component a polyamide or a mixture of several polyamides,
- b) optionally a layer B which has an oxygen-blocking character,
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- c) optionally a core layer C which comprises as the main component a polyamide or a mixture of several polyamides,
- d) a layer D which has an adhesion-promoting action with respect to the adjacent layer C or B or A and the adjacent layer E and
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- e) an inner layer E which comprises as the main component a polyamide or a mixture of several polyamides,
- f) optionally further layers and additives, wherein
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- g) at least one layer comprises natural fibres having a fibre length in the range of from 5 to 10,000  $\mu\text{m}$  and/or a natural fibre mixture of various fibre types and/or fibre lengths.
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2. Seamless tubular casing according to claim 1, characterized in that the main components of layer A comprise either an aliphatic homopolyamide or an aliphatic copolyamide or a blend of aliphatic homo- and copolyamide or a blend of aliphatic homopolyamide and a partly aromatic polyamide.
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3. Seamless tubular casing according to claim 2, characterized in that the partly aromatic polyamides used are substantially built up from m-xylylenediamine

units and adipic acid units or from units of hexamethylenediamine, isophthalic acid and terephthalic acid.

4. Seamless tubular casing according to one of the preceding claims,  
5 characterized in that the natural fibres are cellulose fibres.
5. Seamless tubular casing according to one of the preceding claims,  
characterized in that the natural fibres are contained in at least one of the  
layers in an amount of from 0.1 to 70 wt.%, based on the total weight of the  
10 layer.
6. Seamless tubular casing according to claim 1, characterized in that layer D  
comprises modified homo- and/or copolymers of  $\alpha$ -olefins having 2 to 8 C  
atoms, which contain grafted-on or copolymerized monomers from the group  
15 consisting of  $\alpha,\beta$ -unsaturated dicarboxylic acids and/or monocarboxylic  
acids and/or derivatives thereof, or optionally comprises a polymer as  
described in claim 2.
7. Seamless tubular casing according to claim 1, characterized in that layer B  
20 comprises an approximately completely hydrolysed ethylene/vinyl acetate  
copolymer (EVOH) having an ethylene content of between 25 and 53 % by  
weight or a polymer as in claim 2 or claim 6.
8. Seamless tubular casing according to claim 1, characterized in that layer C  
25 comprises a polymer as in claim 2 or optionally a polyolefin homo- or  
copolymer or a blend of these.
9. Seamless tubular casing according to claim 1, characterized in that layer E  
30 comprises a polymer as in claim 2.
10. Seamless tubular casing according to one of the preceding claims,  
characterized in that the sum of all the layer thicknesses is 25 to 80  $\mu\text{m}$ .

11. Seamless tubular casing according to one of the preceding claims, characterized in that this is heat-set.
- 5 12. Use of the tubular casing according to one of the preceding claims as a wrapping material for paste-like and liquid fillings.
13. Use according to claim 11, characterized in that the paste-like filling is sausage meat.